

WHAT IS CLAIMED IS:

1. A method for automatically generating an object descriptive model,
wherein:

a selection of image signal information is recorded in an object descriptive
group having object descriptive shape features, and

similarity criteria yield a decision whether an object descriptive feature is
assigned to the group, and

a selectable threshold yields a decision whether the group becomes a part of
the recognition model, and

at least strong groups are used for a model for a partial recognition of an
object, strength being determined by the number of the group features, and

after a first model has been generated, additional images are recorded, wherein
new object descriptive features are obtained by subjecting the new features to a
similarity determination, and sufficiently similar new features are added to existing
groups in completing the groups.

2. The method as claimed in Claim 1, wherein the new object descriptive
features are added to the existing groups based on the similarity determination until
the groups no longer change significantly.

3. The method as claimed in Claim 1, wherein statistical values are used
to determine a degree of similarity between the features already included in the
groups and the new features.

4. The method as claimed in Claim 1, wherein at least one of mean values and maximum values is used to determine a degree of similarity.

5. The method as claimed in Claim 1, wherein scattered measured values are stored for each object descriptive feature and are used to characterize a model.

6. The method as claimed in Claim 1, wherein a first partial recognition of an object shifted from the optical image recording axis is used to obtain transformation coefficients for a shifted object position, and wherein an inverse transformation is used to add sufficiently similar shape features of the shifted object to respective ones of the existing groups, to produce larger groups.

7. The method as claimed in Claim 6, wherein the transformation coefficients describe at least one of a change in size and a change in position of the object.

8. The method as claimed in Claim 1, wherein the images are recorded under at least one of more difficult conditions, changed image recording conditions, changed lighting, and a changed object position, and wherein object features are extracted from the images and sufficiently similar shape features of the object are added to respective ones of the existing groups, to produce larger groups.

9. The method as claimed in Claim 1, wherein image equations are established from one object position, in accordance with an image recording technique and a perspective distortion, to determine a relative position of an object feature.

10. The method as claimed in Claim 1, wherein an object descriptive model is generated from a central position in an object recording field and the model

is used for the partial recognition of the object when shifted, to generate a more extensive model for at least one additional object position.

11. The method as claimed in Claim 10, wherein the object is shifted in a plurality of directions, and the model is adjusted with each step.

12. The method as claimed in Claim 11, wherein a compensating calculation across all shifting steps yields a relative three-dimensional position of at least one of the object and the object feature.